

CLAIMS

What is claimed is:

1. A method for manufacturing an air compressor assembly, comprising:  
welding an air tank, the air tank having at least one air access port formed therein;  
submerging the air tank into a dip tank containing cooling liquid; and  
assembling the air tank into an air compressor assembly.
2. The method according to claim 1, wherein the cooling liquid is treated with a corrosion inhibitor.
3. The method according to claim 2, wherein the cooling liquid is cooling water.
4. The method according to claim 3, wherein the submerging step further comprises opening the at least one air access port of the air tank to allow the cooling water to coat both inside and outside surfaces of the air tank.
5. The method according to claim 1, wherein the welding step, the submerging step, and the assembling step are performed in a single manufacturing cell.
6. The method according to claim 1, wherein the air tank is made of metal.
7. The method according to claim 6, wherein the air tank is made of steel.

8. The method according to claim 1, wherein the air compressor assembly is of a portable type.
9. The method according to claim 1, wherein the air compressor assembly is of a "pancake" type.
10. The method according to claim 1, wherein the air compressor assembly is of a "hot-dog" type.
11. The method according to claim 1, wherein the air compressor assembly is of a vertical "hot-dog" type.
12. The method according to claim 1, wherein the air compressor assembly is of a "double hot-dog" type.
13. The method according to claim 1, wherein the air compressor assembly is of a vertical stationary type.

14. A method for manufacturing a portable air compressor assembly, comprising:  
welding an air tank, the air tank having at least one air access port formed therein;  
submerging the air tank into a dip tank containing cooling liquid treated with a corrosion inhibitor; and  
assembling the air tank into a portable air compressor assembly.
15. The method according to claim 14, wherein the air tank is made of metal.
16. The method according to claim 15, wherein the air tank is made of steel.
17. The method according to claim 14, wherein the submerging step further comprises opening the at least one air access port of the air tank to allow the cooling liquid to coat both inside and outside surfaces of the air tank.
18. The method according to claim 14, wherein the welding step, the submerging step, and the assembling step are performed in a single manufacturing cell.
19. The method according to claim 14, wherein the cooling liquid is cooling water.